UT320A
Mini Single Input Thermometer User Manual

I. Introduction
UT320A single input thermometer accepts Type K and J thermocouples.

Features:
- Wide measurement range
- High measurement accuracy
- Selectable thermocouple K/J.

Warning: For safety and accuracy, please read this manual before use.

II. Open Box Inspection
Open the package box and take out the device. Please check whether the following items are deficient or damaged and contact your supplier immediately if they are.

1. UT-T01-------------------------------- 1 pcs
2. Battery: 1.5V AAA ---------------- 3 pcs
3. Plastic holder------------------------ 1 set
4. User manual------------------------- 1

III. Safety Instructions
If the device is used in a manner that is not specified in this manual, the protection provided by the device might be impaired.

1) If low power symbol [battery icon] appears, please replace the battery.
2) Do not use the device and send it to maintenance if malfunction occurs.
3) Do not use the device if explosive gas, steam or dust surrounding.
4) Do not input overrange voltage (30V) between thermocouples or between thermocouple and the ground.
5) Replace parts with the specified ones.
6) Do not use the device when the rear cover is open.
7) Do not charge the battery.
8) Do not throw the battery to fire or it may explode.
9) Identify the polarity of the battery.

IV. Structure
1) Thermocouple jacks
2) NTC inductive hole
3) Front cover
4) Panel
5) Display screen
6) Buttons

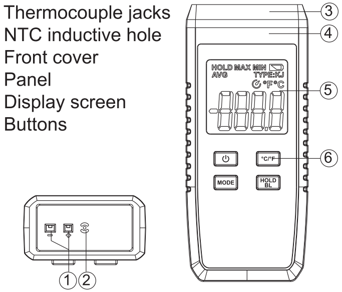


Figure 1

V. Symbols

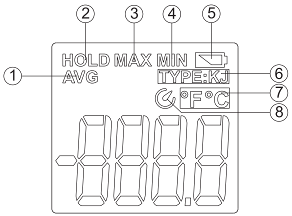


Figure 2

1) Average value
2) Data hold
3) Maximum temperature
4) Minimum temperature
5) Low power
6) Thermocouple type
7) Temperature unit
8) Auto power off

VI. Buttons and setup
[⏻] : short press: power ON/OFF; long press: switch ON/OFF auto shutdown function. [auto shutdown icon]:auto shutdown indicator.

[°C/°F] : short press: switch temperature unit.

[MODE] : short press: switch between MAX/MIN/AVG modes. Long press: switch thermocouple type

[HOLD BL] : short press: switch ON/OFF data hold function; long press: switch ON/OFF backlight

VII. Operation instructions
1)Thermocouple plug
2)Contact point
3)Object being measured
4)Thermometer

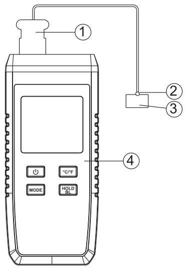


Figure 3

1. Connection
A. Insert thermocouple into input jacks
B. Short press [⏻] to turn on the device.
C. Setup the thermocouple type (according to the type being used)

Note: If the thermocouple is not connected to input jacks, or in open circuit, "----" appears on the screen. If over range occurs, "OL" appears.

2. Temperature display
Short press [°C/°F] to select temperature unit.

A. Place the thermocouple probe on object to be measured.
B. Temperature is displayed on the screen.

Note: It takes several minutes to steady the readings if thermocouples are just inserted or replaced. The purpose is to ensure the accuracy of cold junction compensation

3. Data hold
A. Short press [HOLD BL] to hold the data displayed. HOLD symbol appears.
B. Short press [HOLD BL] again to switch off data hold function. HOLD symbol disappears.

4. Backlight ON/OFF
A. Long press [HOLD BL] to turn on backlight.
B. Long press [HOLD BL] again to turn off backlight.

5. MAX/MIN/AVG value
Short press to cycle switch between MAX, MIN, AVG or regular measurement. Corresponding symbol appears for different modes. E.g MAX appears when measuring maximum value.

6. Thermocouple type
Long press [MODE] to switch thermocouple types (K/J). TYPE:K or TYPE: J are type indicators.

7. Battery replacement

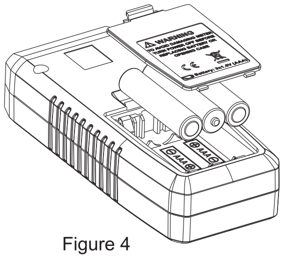


Figure 4

Please replace the battery as figure 4 shown.

VIII. Specifications

Range	Resolution	Accuracy	Remark
-50～1300°C (-58~2372°F)	0. 1°C (0. 2°F)	±1. 8°C (-50°C～ 0°C) ±3. 2°F ((-58~32°F)	K-type thermocouple
		±[0. 5%rdg+1°C] (0°C～1000°C) ±[0. 5%rdg+1. 8°F] (-32~1832°F)	
		±[0. 8%rdg+1°C] (1000°C～1300°C) ±[0. 8%rdg+1. 8°F] (1832~2372°F)	
-50～1200°C (-58~2152°F)	0. 1°C (0. 2°F)	±1. 8°C (-50°C～ 0°C) ±3. 2°F ((-58~32°F)	K-type thermocouple
		±[0. 5%rdg+1°C] (0°C～1000°C) ±[0. 5%rdg+1. 8°F] (-32~1832°F)	
		±[0. 8%rdg+1°C] (1000°C～1300°C) ±[0. 8%rdg+1. 8°F] (1832~2192°F)	

Table 1

Note: operating temperature: -0~40°C (32~102°F)
(thermocouple error is excluded in specifications listed above)

IX. Thermocouple specifications

Model	Range	Scope of application	Accuracy
UT-T01	-40～260°C (-40～500°F)	Regular solid	±2°C (-40～260°C) ±3.6°F (-40～500°F)
UT-T03	-50～600°C (-58～1112°F)	Liquid, gel	±2°C (-50～333°C) ±3.6°F (-58～631°F)
			±0. 0075*rdg (333～600°C) ±0. 0075*rdg (631～1112°F)
UT-T04	-50～600°C (-58～1112°F)	Liquid , gel (food industry)	±2°C (-50～333°C) ±3.6°F (-58～631°F)
			±0. 0075*rdg (333～600°C) ±0. 0075*rdg (631～1112°F)
UT-T05	-50～900°C (-58～1652°F)	Air, gas	±2°C (-50～333°C) ±3.6°F (-58～631°F)
			±0. 0075*rdg (333～900°C) ±0. 0075*rdg (631～1652°F)
UT-T06	-50～500°C (-58～932°F)	Solid surface	±2°C (-50～333°C) ±3.6°F (-58～631°F)
			±0. 0075*rdg (333～500°C) ±0. 0075*rdg (631～932°F)
UT-T07	-50～500°C (-58～932°F)	Solid surface	±2°C (-50～333°C) ±3.6°F (-58～631°F)
			±0. 0075*rdg (333～500°C) ±0. 0075*rdg (631～932°F)

Table 2

Note: Only K-type thermocouple UT-T01 is included in this package.
Please contact the supplier for more models if needed.

UNI-T
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Postal Code: 523 808
http://www.uni-trend.com

Headquarters:
Rm 901,9/F,Nanyang Plaza,57 Hung To Road,
Kwun Tong, Kowloon,Hong Kong

说明书菲林做货要求：

序号	项目	内容
1	尺寸	展开尺寸:210*140mm 折后尺寸：140*52.5mm
2	材质	60g书纸
3	颜色	单色双面印刷
4	外观要求	完整清晰、版面整洁，无斑墨、残损、毛边、刀线错位等缺陷。
5	装订方式	无
6	表面处理	无
7	其它	无
版本		0
修改页码		

DWH 设 计	宣浩	MODEL 机型：UT320A	Part NO. 旧P/N: 物料编号：新P/N110401106697X
CHK 审核		UNI-T 优利德科技（中国）有限公司 UNI-TREND TECHNOLOGY (CHINA) LIMITED	
APPRO. 批准			